

## **Data Description for Alligator Nest Counts**

### **General:**

This description covers three different data sets in three different reporting formats. The oldest format (alligatornests.csv) reports the 1987-2001 alligator nest surveys, and the two later formats (caerngators.csv and caerngators030405.csv) report all surveys since 1998. The files overlap for the years 1998-2001 because data were collected using both formats during those years. There is also a one-year overlap in 2003 between the two later data sets.

The Louisiana Department of Wildlife and Fisheries conducts an annual alligator nest survey in June or early July. A team of two biologists flies along specified transects as passengers in a Bell 206B Jet Ranger helicopter, flying at 60 mph at an altitude of approximately 150 feet, counting nests along a strip estimated to be 350 feet wide. Each transect mile thus represents approximately 42.4 acres of habitat surveyed. One observer navigates and records data, while the other counts nests. (See map 200211400.pdf for transect locations.)

The study area (Breton Sound) has been classified into these marsh types: fresh, intermediate, brackish, and “brackish>10.” The last mentioned is brackish marsh with salinity greater than ten parts per thousand. Salt marsh is excluded from the survey, as it is not considered nesting habitat.

The newer data sets (caerngators.csv and caerngators030405.csv), report the latitude and longitude of each nest. This data set does not distinguish brackish marsh from “brackish >10”, nor does it report distance flown for each marsh type. These records begin in 1998. A new category of marsh, “transitional intermediate” appears in the records beginning in 2003.

### **Data Column Descriptors for Old Format “alligatornests.csv”:**

*Distance flown (in specified marsh type):* Linear distance, in statute miles, along the transects mentioned above. One mile of transect distance corresponds to approximately 42.4 acres of habitat.

*Nest Count (in specified marsh type):* This is the number of nests observed in the respective marsh type.

*Total Distance:* This is the sum of the distances flown over the four marsh types.

*Total Count:* This is the sum of the nest counts for the four marsh types.

**Data Column Descriptors for New Format “caerngators.csv” and “caerngators030405.csv”:**

*Parish:* Reports the parish in which the nest was sighted.

*Marsh Type:* Reports the marsh type as fresh, intermediate, or brackish. Early data sets from the Caernarvon study area distinguished between brackish marsh with salinity above and below ten parts per thousand. These data do not. The category, “transitional intermediate” is first used in 2003.

*Transect Line:* These transects are shown in Map 200211400.pdf. The table below gives the longitude of each transect along with the latitude of its north and south terminus:

<b>Transect Number</b>	<b>North Latitude</b>	<b>South Latitude</b>	<b>Longitude</b>
31A	29° 52' 40"	29° 40' 50"	89° 57' 42"
31B	29° 52' 00"	29° 38' 10"	89° 55' 44"
32	29° 52' 00"	29° 37' 05"	89° 53' 52"
32C	29° 52' 32"	29° 35' 40"	89° 52' 00"
32A	29° 52' 30"	29° 35' 35"	89° 50' 07"
32B	29° 52' 30"	29° 35' 00"	89° 48' 15"
33	29° 51' 10"	29° 34' 15"	89° 46' 24"
33C	29° 50' 50"	29° 32' 40"	89° 44' 30"
33A	29° 51' 10"	29° 31' 30"	89° 42' 38"
33B	29° 49' 45"	29° 28' 40"	89° 40' 46"
34	29° 48' 45"	29° 27' 30"	89° 38' 54"
34A	29° 49' 05"	29° 26' 50"	89° 35' 10"
34B	29° 47' 35"	29° 21' 30"	89° 33' 18"

*Latitude Coordinate of Nest Site:* Decimal degrees.

*Longitude Coordinate of Nest Site:* Decimal degrees.

*Waypoint:* Each nest site is given a unique, three-digit identifier, starting in 2003.

*Date:* The latest data set, “caerngators030405.csv”, gives the date of the survey.